

Notice of Allowability

Application No.

09/151,764

Examiner

Jared J. Fureman

Applicant(s)

DOWLING ET AL.

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the papers filed on 5/13/2004 and 7/2/2004.
2. ☒ The allowed claim(s) is/are 25,27,36,40-43 and 49-51.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☒ to Paper No./Mail Date 11/8/2000.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Jared J. Fureman
Jared J. Fureman
Examiner
Art Unit: 2876

DETAILED ACTION

Receipt is acknowledged of the amendments, filed on 5/13/2004 and 7/2/2004, which have been entered in the file. Claims 1-25, 27-43, and 49-51 are pending, with claims 1-24, 28-35, and 37-39 having been withdrawn from further consideration as being drawn to a non-elected invention.

Election/Restrictions

1. This application is in condition for allowance except for the presence of claims 1-24, 28-35, and 37-39 drawn to an invention non-elected without traverse. Accordingly, claims 1-24, 28-35, and 37-39 been cancelled.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the claims:

Claims 1-24, 28-35, and 37-39 have been cancelled, and a complete list of all claims appears below.

1-24. (Canceled)

25. (Previously presented) An optical symbology imager, comprising:

a multiple line charge coupled device (CCD) having an active area;

a focusing apparatus comprising a focusing disk with multiple optical positions to provide different focal lengths, said disk being rotatable so that each of said multiple optical positions can move into an optical path of said imager;

a microprocessor for controlling said focusing apparatus and operation of said CCD, so that said CCD performs image capture producing image data for each of said multiple optical positions;

said microprocessor controlling said CCD to shift out said image data substantially serially;

said microprocessor evaluating transitions between light and dark data in a central set of multiple lines to produce a representative value for each of said multiple optical positions, wherein a largest representative value corresponds to one of said optical positions producing optimum focus; and

wherein said CCD disposes of a first set of multiple lines without reading and digitizing said first set of multiple lines at a first rate of speed during focusing, and then samples a second subsequent set of multiple lines from said central set of scan lines at a second rate of speed less than said first rate of speed during focusing.

26. (Canceled)

Art Unit: 2876

27. (Previously presented) An optical symbology imager as recited in claim 25, wherein said representative value is produced by totaling a first seven to ten values from multiple values produced for each of said multiple focusing positions.

28-35. (Canceled)

36. (Original) An optical symbology imager as recited in claim 25, wherein said optical symbology imager is hand-held.

37-39. (Canceled)

40. (Previously presented) An optical symbology imager as recited in claim 25, wherein said first set of multiple lines is 246 lines.

41. (Previously presented) An optical symbology imager as recited in claim 25, wherein said second set of multiple lines is substantially ten lines.

42. (Original) An optical symbology imager in accordance with claim 25 wherein said multiple line CCD has a resolution of 659 by 494.

Art Unit: 2876

43. (Original) An optical symbology imager in accordance with claim 25, wherein said microprocessor only utilizes said central set of multiple lines to produce the optimum focus.

44-48. (Canceled)

49. (Previously presented) An optical symbology imager in accordance with claim 25, wherein said multiple optical positions are at least two.

50. (Previously presented) An optical symbology imager in accordance with claim 25, wherein said multiple optical positions are eight.

51. (Previously presented) An optical symbology imager in accordance with claim 25, wherein said multiple optical positions are twelve.

52-55. (Canceled)

Allowable Subject Matter

3. Claims 25, 27, 36, 40-43, and 49-51 have been allowed over the prior art of record. Applicant's arguments, see page 6 of the amendment filed 5/13/2004, with respect to the Parulski et al reference have been fully considered and are persuasive. The previous grounds of rejection have been withdrawn.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McNeil et al (US 6,746,864) teaches skipping rows of an imager that contain unnecessary image data (see column 11, lines 12-36). However, without the benefit of applicant's teachings, there is no motivation for one of ordinary skill in the art at the time of the invention to combine McNeil et al with the other prior art of record in a manner so as to create the claimed invention.

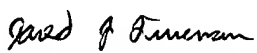
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (571) 272-2391. The examiner can normally be reached on 7:00 am - 4:30 PM M-T, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2876

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jared J. Fureman
Examiner
Art Unit 2876

July 28, 2004